

NEW MICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 10-19-67	
Company Mallard Petroleum, Inc.				Connection None			
Pool Wildcat				Formation Morrow		Unit	
Completion Date 10-15-67		Total Depth 12,396'		Plug Back TD 12,308'		Elevation 3648' DF	
Farm or Lease Name Alves		Well No. 1		Unit P		Sec. 6	
Csg. Size 7" 29.26, 23.11.6#		Set 11,345'		Perforations: From 12,100 To 12,258'		Twp. 20-S	
Tbg. Size 2 3/8" 4.7#		Set At 11,862'		Perforations: From To		Rge. 36-E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 10,939' and 10,945'		County Lea	
Producing Thru Tubing		Reservoir Temp. °F @ 159		Mean Annual Temp. °F 13.2		State New Mexico	
L 12,179'		H .65		Gg -		Prover None	
M -		N -		O -		Meter Run 3"	
P -		Q -		R -		Taps Flange	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI	3"		2"	-	-	84	4340	79			SI
1.	"		"			84	2943	80			2 hrs.
2.	"		"			80	2077	79			2 hrs.
3.	"		"			85	1571	80			2 hrs.
4.	"		"			89	1127	80			2 hrs.
5.	"		"			89	1130	80			24 hrs.

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	27.52	42.2	595.2	.9777	.9608	1.057	1153
2	"	69.8	595.2	.9813	.9608	1.059	1918
3	"	84.5	595.2	.9768	.9608	1.057	2306
4	"	90.6	820.2	.9732	.9608	1.081	2520
5	"	93.7	820.2	.9732	.9608	1.081	2580

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 9.7 Mcf/bbl.
1.					A.P.I. Gravity of Liquid Hydrocarbons 50.2 Deg.
2.					Specific Gravity Separator Gas .65 X X X X X X X X
3.					Specific Gravity Flowing Fluid X X X X X
4.					Critical Pressure BHP 6450 P.S.I.A. P.S.I.A.
5.					Critical Temperature R R

P _c 6450	P _c ² 41602		
NO.	P _r ²	P _w	P _w ²
1	1824	23271	18391
2	3656	13366	28236
3	2860	8214	33388
4	2228	4964	36638
5			

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.136$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2845$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.132$

Absolute Open Flow 2300 Mcfd @ 15.025	Angle of Slope 46	Slope, n .97
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Remarks:

Approved By Commission:	Conducted By: C. A. Dorsey	Calculated By: C. A. Dorsey	Checked By: R. W. Keener
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